

ADVANCES IN MATHEMATICS 23, 117-118 (1977)

## Book Reviews

L. B. OKUN, *Weak Interaction of Elementary Particle Physics*, Pergamon Press, 1965, 292 pp. It is much easier for a mathematician to read a physics book after the physics becomes obsolete, and that is in fact what usually happens. One wants to concentrate on the math, which is difficult to do if the physics is still under discussion. One then realizes how much good and new math physicists know without knowing it.

J. GRANDELL, *Doubly Stochastic Poisson Processes*, Springer, 1976, 233 pp. The first book on this developing branch of probability, and we hope not the last. Though incomplete—the important work of Nawrotzky is not even touched upon, for instance—still, it is a good statistically biased introduction.

R. M. KARP, Ed., *Complexity of Computation*, American Mathematical Society, 1974, 166 pp. Much too short. The subject is exploding, and only some trends are covered, although the papers are thorough and informative. We hope a longer one will soon appear.

J. E. HUMPHREYS, *Ordinary and Modular Representations of the Chevalley Groups*, Springer, 1976, 126 pp. Fascinating subject, the analogy between Lie group and their junior brethren over finite fields. But, alas, so complex!

S. A. ALBEVERIO AND R. J. HOEGH-KROHN, *Mathematical Theory of Feynman Paths Integrals*, Springer, 1976, 139 pp. A brave attempt at a “mathematical theory” that has long been a desideratum, but not entirely a convincing one in its definitiveness. At any rate, any further attempts will have to take this one into account.

W. STEGMULLER, *The Structure and Dynamics of Theories*, Springer, 1976, 284 pp. High-class philosophy of science, with stress on physics. An offshoot of Kuhn’s wildly—and justly—successful “The structure of scientific revolutions.” Good medicine against overspecialization, not requiring a physician’s prescription.

W. GREUB, *Linear Algebra*, Springer, 1976, 451 pp. One of the best-sellers in linear algebra. Thoroughly written and easy to consult. We wish the author a fifth edition soon.

M. E. VAN VOLKENBURG, Ed., *Circuit Theory: Foundation and Classical Contributions*, Dowden, Hutchinson and Ross, 1974, 450 pp. It is fascinating to observe—as one can on reading this unique collection—how several ideas of mathematical analysis of the past 50 years had a parallel and independent development in circuit theory. This cannot be an accident (there are no accidents in mathematics), but no one seems to have investigated what lies behind it, rewarding as such an investigation might be.

G. ZONTENDIJK, *Mathematical Programming Methods*, North-Holland, 1976, 500 pp. Despite the somewhat dull title (but it is hard to think of a more appropriate one), this survey is clear and up-to-date, and includes a number of topics never before collected in a text. The slightly theoretical bias will make the material accessible to algebraists in search of some applied outlet.

D. BERLINSKI, *On Systems Analysis*, MIT Press, 1976, 186 pp. The eye-catching, P.-R.-minded, ornamental use of mathematical jargon in subjects which are still ages